

WHAT IS CLAIMED IS:

1. A weight position sensor system for use with a
scale for measuring the weight of an object, said scale
5 comprising

a weight supporting surface for supporting an object
to be weighed;

one or more load detection sensors for detecting the
presence of said object on said supporting surface;

10 a controller for receiving a signal from said one or
more load detection sensors indicative of the relative
position of the center of gravity of said object with
respect to the location of said one or more load
detection sensors; and

15 an output signal generator for generating a signal
indicative of said relative position.

2. The system according to claim 1, wherein said
output signal generator includes a signal display screen
20 for displaying a visual signal indicative of said
relative position.

3. The system according to claim 2, wherein said
output signal generator generates one or more signals and
25 displays corresponding visual signals in response to
successive re-positioning of said object's center of
gravity relative to said one or more load detection
sensors.

30 4. The system according to claim 1, wherein

said output signal generator generates an audible signal indicative of said relative position.

5 5. The system according to claim 1, wherein said one or more load detection sensors are four load detection sensors.

10 6. The system according to claim 5, wherein said four load detection sensors are arranged in a uniform, square configuration about said weight supporting surface.

15 7. The system according to claim 1, further comprising a balance display.

20 8. The system according to claim 7, wherein said balance display is operatively connected to a signal display screen.

 9. The system according to claim 7, wherein said balance display is operatively connected to said computer.

25 10. The system according to claim 7, wherein said balance display includes a central light and an array of lights.

30 11. The system according to claim 10, wherein the array of lights are arranged symmetrically about the central light.

12. The system according to claim 10, wherein the central light and the array of lights light up in an array indicative of a user's center of gravity position.

5 13. The system according to claim 7, wherein said balance display will indicate the balanced condition when a user's weight is sufficiently centered with respect to said one or more load detection sensors.

10 14. The system according to claim 1, wherein said controller activates a time-out sequence to power-off the system after a predetermined period.

15 15. The system according to claim 1, further comprising a display clock and calendar.

16. The system according to claim 1, further comprising a radio and/or audible signaling device.

20 17. The system according to claim 1, further comprising a programmable sound.

18. A scale for measuring the weight of an object, comprising
25 a weight supporting surface for supporting an object to be weighed;
 one or more load detection sensors for detecting the presence and weight of said object on said supporting surface;
30 a controller for receiving a signal from said one or more load detection sensors indicative of the relative

position of the center of gravity of said object with respect to the location of said one or more load detection sensors and one or more signals indicative of the weight of said object; and

5 an output signal generator for generating a signal indicative of said relative position and a signal indicative of the weight of said object.

19. The scale according to claim 18, wherein said
10 output signal generator includes a signal display screen for displaying the signal indicative of said relative position.

20. The scale according to claim 18, further
15 comprising a balance display.

21. A method of positioning a user to determine the user's weight using a scale having a display and a plurality of sensors, said method comprising:

20 activating said plurality of sensors and said display of said scale;

25 positioning the user on said scale;

30 displaying on said display visual indicators indicative of load distribution among said plurality of sensors, wherein the user can re-position in accordance with said visual indicators prior to obtaining determining the user's weight.

22. The method according to claim 21, further comprising displaying on said display the user's weight.

23. The method according to claim 21, wherein said
5 plurality of sensors are a plurality of electronic sensors.

24. The method according to claim 21, wherein said
display is an electronic display.
10

25. The method according to claim 21, wherein said activating step comprises tapping the center of an upper surface of said scale.

15 26. A scale for measuring the weight of an object, said scale comprising

an upper surface;

20 a plurality of electronic sensors, each for sensing a load that is a portion of a total load applied to said upper surface of said scale by the object,

wherein the sum of the loads of said plurality of
25 sensors equals the total load applied to said upper surface of said scale by the object.

27. The scale according to claim 26, wherein said
plurality of sensors is four load cells.
30

28. The scale according to claim 27, wherein said four load cells are applied one to each corner of said upper surface thereby forming a generally rectangular pattern.

5

29. The scale according to claim 27, wherein each of said four load cells comprises a strain gauge.

30. The scale according to claim 26, further comprising a plurality of feet, and wherein each foot is positioned in a corner of said scale.

31. The scale according to claim 30, wherein each of said plurality of sensors is located directly above a different one of said plurality of feet.

15

32. The scale according to claim 31, wherein each of said plurality of feet is movable relative to said upper surface.

20

33. The scale according to claim 33, wherein said relative movement is in response to the load measured by said plurality of sensors.

25

34. The scale according to claim 33, wherein said plurality of sensors are a plurality of strain gauges.